

Gladstone says labor organization has saved England from revolution.

An electrician says that a very high speed on electric roads will never be practicable on account of the impossibility of stopping the trains quickly.

Many persons shudder at the thought of cremation. But they think it is all right, marvels the *Atlanta Constitution*, to stow away 30,000,000 corpses under ground in this country in one generation.

Indiana has a new road law which forbids hauling more than a ton on narrow-tired wagons or more than 2500 pounds on broad-tired ones, while the roads are soft, under a penalty of from \$5 to \$50.

Mr. Ye Cha Yun, the Charge d'Affaires in Washington from the kingdom to the northeast of China, spells his country's name with K—Korea. This is in accordance with the decision of the United States Board of Geographical Names.

The cadets of the Naval Academy want to establish some kind of a memorial to Midshipman Philip Spencer of the brig Somers, who was hanged at the yard-arm while at sea in 1843 for alleged mutiny, and certain influential women at Washington have offered to help them. It is the judgment of history that his punishment was not deserved.

A new charity has just been chartered in New York called "The Two-Cent Diet Kitchen for the Relief of the Poor," with headquarters at No. 300 Avenue A. A meal can be served for two cents each day during the week to those who are in poor circumstances. The daily bill of fare consists of coffee, soup, pork and beans, fish, cake and sandwiches.

Seven of our colleges have furnished nine Presidents of the United States, eleven Vice-Presidents of the United States, eighty Cabinet officers, ninety-four United States Senators, 193 United States Senators, 670 delegates and members of Congress, four Chief Justices, eighteen Associate Justices, eleven United States Circuit Judges, eighty-seven District and other United States Judges, 506 Judges of highest State Courts and 156 Governors of States.

The Trenton (N. J.) *American* states that the originators of the society called "The Colonial Dames of America," having filed their certificate of incorporation in the County Clerk's office, are now ready to go ahead with their work. They mean to make a large collection of documents, historical facts and mementoes of Colonial times, and especially of the Revolutionary War. The managers are ladies well-known in New York society. It is probable that in the near future they will have a building of their own to be used for the storage and display of their historical collection. The enterprise is receiving a great deal of encouragement from people in different sections of the United States.

It is the belief of the New York *Independent* that farmers should give more attention to the raising of draft and carriage horses. Thousands of dollars are sent out of every county every year for horses for various purposes. Colonel Curtis says that New York State exports on an average from \$25,000 to \$100,000 per county for horses, and this does not include counties in which there are large cities. Draft horses weighing from 1400 to 1700 pounds are in great demand, and the demand for carriage and coach horses cannot be met. Farmers sell their farm products at an average price of about one cent per pound, and buy horses at from ten to twenty cents per pound, which is not very profitable business.

The craze (it is nothing else, says the *Germanian Telegraph*) for the use of poisonous preparations for destroying predatory insects on fruit trees and crops in general is much to be regretted. There is no doubt that for the present they are effective, and may not be injurious to those who eat of the poison protected products. Arsenic is the principle and is combined with copper in various ways. Both arsenic and copper are mineral poisons of the most deadly character. This is proved by their destructive effects not only on the insects, but on the foliage also. Constant spraying of fruit trees and bushes must leave some to impregnate the soil. Vegetation will not absorb a part, and as the quantity yearly increases soon a very large part. Humanity finally swallows the surplus, and what then?

An English gentleman who visited this country with the members of the Iron and Steel Institute said in London recently: "I went to America last autumn with my son, and we traveled over more than 12,000 miles of railway all over the continent, and never had a hitch or failed to make a connection throughout all the journey." In commenting on this the Duke of Marlborough said: "It is not a flattering thing, perhaps, to our national pride, but if the truth is told, our English railways are toy systems, and our rolling stock are toy freight carriers compared to the trains that are run all over America. The immense haulage of American lines done on single pairs of rails is marvelous, and these systems must continue to grow to meet the wants of increasing population and the large centres of permanent industry and manufacture that exist in this country."

AGRICULTURAL.

TOPICS OF INTEREST RELATIVE TO FARM AND GARDEN.

KEEPING HORSE RADISH ROOTS.

Where the family supply of horse radish is taken from roots grown on the place, they may be allowed to remain undug through the winter. But all that are to be used should be got out before the tops sprout in the spring, as this injures the flavor and gives the root a hard, woody character. If dug and placed in a cool place in earth, the roots can be used till nearly midsummer, though the better way for late use is to grate the root and cover with strong cider vinegar, the sourer the better. Cork tightly to prevent fermentation.—*American Cultivator*.

PROPER RULE IN FEEDING.

A large part of the money made in feeding animals for the butcher is made before they get very fat. Lean animals with proper care and feeding may be made to take on flesh rapidly and there is often a good deal of profit in the process. But when a fleshy condition is reached all the extra fat secured is obtained at a disadvantage, as the cost per pound of the grain is greatly increased. Then, too, there is a constant risk of disease or accident when animals are kept in an excessively fat condition. It is much safer, and in most cases is a good deal more profitable, to sell the stock as soon as it is ready for the butcher. The exception to this rule is found when the supply is short and prices have a strong upward tendency. But even then the results of holding for higher prices are often disappointing.—*American Dairyman*.

SAVE THE CORN AND SPARE THE CROWS.

By and by the crows will be pulling the corn and doing serious damage. This seems to be unavoidable. The crows cannot well be spared for the good they do at other times, and to shoot them would be to destroy a useful bird which lives chiefly upon noxious insects and small animals. There is a way to save the corn and spare the birds at the same time. This is to tar the seed in this way: Put the seed corn in warm water and stir it with a tarry stick. The seed will be coated with a film of tar, which will retain the odor and make the grain distasteful to the birds. A few scarecrows made of a small block of wood with small holes bored in it, into which feathers are inserted, so as to make a rough semblance of a bird, and then hung in places in the field 200 feet apart, which will give one to the acre, will alarm the birds and keep them at a distance. As they float and dance about in the wind they seem to be alive and in trouble, and thus frighten the birds.—*New York Times*.

PEKIN DUCKS.

Pekin ducks are probably the most valuable breed of ducks known to-day. They are very large, mature early, and have snow-white plumage. Their eggs hatch two or three days sooner than any other variety. The ducklings hatch out stronger and seem to grow faster than the young of any other breed, and they can be raised anywhere that you can raise chickens. The young ducklings feather up rapidly and grow to good size in from six to eight weeks. This makes them well adapted to raising for the early markets. They are excellent foragers and excellent layers. With good range they require but little feed, and the young are not subject to roup, cholera, gaps, and the like as are young turkeys and chickens.

They command good prices in the markets, and will weigh from fourteen to eighteen pounds per pair the first year without much fattening.

As egg producers, their record is remarkable, and they come as near being perpetual layers as any of the breeds of fowls.—*Farm, Field and Stockman*.

WATERMELON CULTURE.

L. M. H., Russellville, Ark., writes: I have been growing watermelons for twelve years, and find that to be successful, one must have good, fresh land, and that break it well; then check it off both ways (sixteen feet apart) and put a heap of horse manure in the furrow and put the seed in the furrow, leaving a space of three inches between the cross points. Fill this unmanured space with dirt, plant five or six seeds to a hill, cover one and one-half inches deep, then dig a little dirt up over the manure to prevent the sun from killing it. When the seeds come up and get three leaves to each plant, pull out all the best looking one; a good stand of vines is thus secured, and all will come on alike. Be sure to plow and hoe the vines as long as possible; the last time, when the vines are two to three feet long, run your harrow both ways, and make the land as level as possible. After this keep the soil well cleaned with the hoe, and let the vines run at will. It is best to have as much trash on the ground as possible to prevent the wind from rolling the vines about. If the season suits, you will have watermelons weighing from forty to seventy pounds each. In case of a drought, punch three holes in the bottom of old tomato cans, sink them in the ground within six inches of tap root and fill with water. One filling will last three days, and then if it does not rain fill again. By this method, as here given, you cannot help having fine melons.—*Orange Judd Farmer*.

RAISING BROOM-CORN.

Broom-corn is not an especially difficult crop to raise, requiring as it does much the same kind of soil and culture as Indian corn. It is rather more susceptible to frost and succeeds best on rich bottom-lands. It may be drilled or planted in hills much the same distance apart as corn, with ten or more seeds to the hill, to be afterwards thinned out by leaving from four to six of the most thrifty plants in each. The ground should be put into a fine, friable condition by harrowing it thoroughly before planting, and should be kept entirely clear of weeds afterwards. The plants, when young, are very delicate and their early culture will be much more difficult on a naturally weedy ground. When nearly ready to harvest, lopping or bending down the top part of the stalks is practised in some localities. Tabling consists in bending the stalks of two rows towards each other, at about three feet from the ground, thus forming a support on which the brush can be laid temporarily as it is cut off. Another

practice is to lay the brush in bunches convenient for loading on a wagon.

For a desirable quality of brush the cutting should be done before the ripening of the seed. About eight inches of stalk should be left on the brush. The preparation of the brush consists in simply cleaning off the seed, which for small amounts may be done by various devices, such as a hatchet or a long-toothed comb made for the purpose. For large crops scraping machines, run by horse or steam power, are used. Broom-corn is best stored in open buildings or under sheds upon racks not directly exposed to the sun, by which its toughness and a desirable green color are better preserved. Only such as have land well adapted to it, together with some experience, are likely to find it more profitable than ordinary crops.—*New York World*.

SPINACH.

As spinach lasts but a short time it is necessary to sow it frequently. It is so hardy that it may be put in the ground very early. It grows rapidly and is soon ready for use. The ground should be made very rich, and the seeds put in drills one foot apart and an inch deep, though they do well when sown broadcast and covered a depth proportioned to their size.

The thick leaved and large round-leaved spinach are both good varieties for spring planting. The New Zealand for summer, and the prickly seed for winter, the one withstanding drought, and the other hardy. The former is much used in New Zealand and has become extensively cultivated as a kind of spinach elsewhere. The prickly has triangular, arrow-headed leaves. There is also a savory variety, the wrinkled leaves resembling cabbage, and the Virolay, which is perhaps the newest sort, with very large, thick leaves.

Spinach, though so unlike in appearance, is a near relative of the beet and the mangel wurtzel. Every year spinach seems to increase in popularity. The market gardener, of course, prepares the ground and sows his seed in the fall. There is no reason why the farmer when he makes his garden in the spring should not have beds of spinach, as it requires little skill to cultivate it with success. It is well to give it a sheltered place, as it needs to grow rapidly to develop the succulent tenderness of the leaf. After the spinach is quickly and well grown it should not be spoiled in the cooking. The leaves may be pulled from the stalks, washed in cold water, boiled fifteen or twenty minutes, then drained quite dry in a wooden bowl, returned to the succupan and well heated and seasoned, then served in a hot dish and garnished with slices of hard-boiled eggs. This is the simplest and one of the best ways of serving this early and very desirable vegetable, but it may also be prepared a la creme, moulded or served on toast or with eggs.—*St. Louis Republic*.

FARM AND GARDEN NOTES.

All rubbish is a nest for vermin.

Sheep should not be fed with cattle.

Keep all young animals dry and warm.

Grow apple or nut trees in all waste places.

Manure is one of the products of stock raising.

A mare on a farm should annually raise a colt.

Commercial fertilizers are better than raw manure.

It is profitable to grow potatoes at fifty cents a bushel.

Good potatoes are a luxury; poor potatoes are plenty.

In Europe, pigs weighing about 200 pounds are preferred to larger ones.

Do not be in a hurry to have your sheep care for themselves in the fields.

Every bushel of necessary grain withheld is equivalent to two bushels thrown away.

If butter makers as a class were better judges of butter they would make better butter.

Ducks are enormous eaters and sometimes it is difficult to determine when they have had enough.

Linsed oil is said to be a remedy for black knot on the plum if applied to the knot upon first appearance.

Young ducks must be kept out of the water, as they are liable to get chilled, and often this will prove fatal.

Two beans two inches apart will yield as much as two in the same space. It is a waste of seed to sow too close.

With goslings it is important to give abundant nourishment from the start in order to secure a good growth.

It is only in exceptional cases that it can be made profitable to keep poultry confined on the farm. Give them a free range.

Guinea eggs should not be set for hatching until warm, settled weather. The chicks are very tender at first and need the best of care.

The poorest acre on the farm will pasture at least one sheep which will produce a fleece worth from \$1.50 to \$2.50, and a lamb worth from \$3 to \$5.

Success hinges upon the man and his surroundings. Find your market before your crop is ready and send the produce in the neatest and most attractive condition.

Twenty eggs is a good average for geese; they are not nearly so prolific layers as ducks, and unless they begin laying very early will lay only one clutch.

Try two and one-half bushels of oats and one of peas on an acre. Cut early, it is excellent for hay; ripened, the grain ground together, is excellent feed for horses and pigs.

Plant the garden so as to have all of the ground occupied during the growing season. There is no advantage in planting any kind of garden seed when the soil is wet and cold.

A Minnesota farmer, who is now fattening 1000 sheep, says: "I can take the wool from my sheep, throw it away and then make more money from them than I can on cattle or hogs."

James J. H. Gregory says that for the onion maggot he has found hens and chickens a possible remedy. He claims that a hen and brood of chickens will take care of from an acre to an acre and a half.

While some farmers spread all their manure on ten acres in order to grow a crop of corn and bestow the labor on a large area, others may perform their work on a single acre of celery, cabbage, or small fruit and realize a larger profit than those who cultivate ten times as much land.

THE SCIENTIFIC SHAVE.

Most Approved Manner of Robbing the Winds of Their Alleged Promenades.

There is a popular impression among those who patronize a barber from two to seven times a week that not a great many people shave themselves. That this impression is decidedly erroneous may be easily learned by any one who cares to make even a cursory investigation. The fact is there are thousands of people who shave themselves, and the custom is daily growing. The idea that "time is money" is all right, but the other idea that time spent in waiting for a "turn" in a barber shop is money saved is being exploded. For men of leisure and means the luxury of a fine upholstered barber chair, the manipulation of a cleanly, expert barber, who uses only the best materials



HOW TO HOLD A RAZOR.

and the keenest tools, is not to be called into question, says the *New York Press*.

That there is skill and industry required to get into the practice of shaving one's self goes without saying. There are many men who would prefer to shave themselves if they only knew how to do it. With the view of getting some intelligent instruction upon this matter for the benefit of such, as well as for his own accommodation, the writer, who never shaves himself, called upon one of the most intelligent barbers in the city and requested him to give in a brief but clear way the necessary directions for shaving. He willingly complied, and here is in substance what he said:

"When you are going to shave yourself prepare your lather from some pure soap with either warm or cold water (warm water preferred) until it comes to the consistency of cream, and apply it to the face with a pliable brush. You will then, if you desire the beard to cut without much resistance, rub the lathered surface vigorously with the thumb and the third and fourth fingers, lathering anew when you have rubbed sufficiently. Open the razor wide, grasp it firmly by the hank and handle and pass it rapidly up and down a canvas strap, reversing the blade with each stroke. Next apply the blade to a Russia-leather strap made for the purpose. A good and well-made razor strap, with two or four sides, will answer the same purpose. Placing yourself before a mirror, with a bit of clean paper, free from grit, conveniently near, open the razor a little more than half-way, and you have reached the first position, which is this:

"Grasping the forehandle of the razor gently but firmly with the thumb and three fingers, and looping the little finger in the crescent of the shank, begin opposite the ear and work downward over the cheek toward the chin with a sort of saw motion, for the razor, you know, is a delicate saw. Lay the razor as flat upon the face as you can and make it cut smoothly. This is



FIRST POSITION.

the downward cut. In shaving under the chin, you note the second position: "You will notice that the plan of holding the razor is not perceptibly changed, but that the arm or wrist and forearm are almost reversed from the preceding position. In this way you proceed over the entire face.



SECOND POSITION.

hand, and naturally adjust the position of the razor as practice and use require. It is not a difficult task, and a little perseverance overcomes all obstacles. There is a third position which a single-handed shaver uses. It is this:

"To find the little places you may have missed, run the fingers of the unoccupied hand over the face, and if you want to shave close you may clean off all the beard, even to the extent of going a day or two under the skin.



THIRD POSITION.

changing the arm to meet the demands of locality, but not necessarily altering the position of the razor. Experts use both hands, but the majority of men who shave themselves can use only one moisture. Wash the face with warm water first, then apply any good, pure toilet water preferred."

QUEEN OF WASHERWOMEN.

Rich and Powerful Corporation with an Annual Sovereign.



HE washerwomen of Paris form a rich and powerful corporation, and once a year they enjoy a splendid frolic. Long before the day of M. Carnot a woman d'ave they have their elections, arranged their order of procession, and decided where they will hold their evening revel. In each quarter of Paris there is a "lavor" or public wash-house, and along the River Seine there are also many others. In these thirty or forty establishments there are always many robust types of feminine beauty, and a woman who wishes to become the talk of the town can do it most effectually by getting the nomination of "Queen of the Washerwomen" for the season.

The pageant generally represents a strange mixture of pagan mythology and medieval splendor.

There are 83,000 women in the corporation of washerwomen. So it is no light honor to be chosen their queen, and to have absolute power over them, if only for one day.

Mlle. Siccard, 26 years old, with a splendid brunette, 26 years old, with a profile worthy of an antique statue of Venus and a bust of almost as heroic size as that of the great statue of the Republic, near which she was crowned queen the other day. She was the unanimous choice of the women in all the Paris lavoirs. In the procession she rode in a great coach garnished from top to bottom with camellias and draped with red velvet sown with golden stars. The coach was drawn by four magnificent white horses.

Crowned with a golden diadem, dressed in a cream-colored satin gown with golden embroideries, the beautiful blanchisseuse perhaps fancied, as she rode enthroned on her coach past the hundreds of thousands of laughing Parisians, that she was indeed a queen.

But that did not hinder her from taking her usual place next morning in the wash-house and attending to her business as usual.

A Diseased Pearl.

One peculiarity of pearls is that, unlike other precious gems, they are liable to decay. Occasionally a valuable pearl changes color, seems to be attacked with a deadly disease, and crumbles into dust.

Such is reputed to have been the fate of the most magnificent specimen ever known. Passing through successive hands, it finally became the property of a Russian merchant, and found a possessor who knew its immense value and prized it accordingly. He kept it in a secluded room of his magnificent mansion, apart from all other of his treasures. It was the wonder and admiration of his favored friends who were permitted to look at it. The merchant finally became involved in a political conspiracy and fled to Paris, taking his one great treasure with him. He kept it hidden for a time, but at last consented to show it to some distinguished lovers of precious stones. But when he opened the casket he fell back in dismay and staggered as though stricken with death. The gem had begun to change color. A fatal disease had attacked it. It was soon a worthless heap of white powder, and the once wealthy merchant was a pauper.

The world's famous pearl fisheries in the East are near the coasts of Ceylon, Japan, Java and Sumatra, and in the Persian Gulf, although pearls in limited quantities are obtained in the streams of various countries.

Before the divers began their work there are blessings and magic spells from priests and sorcerers to drive away the sharks and bring good luck. These incantations are, of course, roundly paid for. The boats start out late at night, so that operations may begin at daybreak. The divers have small instruments for compressing the nostrils, and beeswax to stop the apertures in their ears. Each one holds a block of stone between his feet to aid his descent. Leaping from the boat and plunging beneath the waves, the divers reach the bottom, where they run about swiftly and fill their bags with oysters as quickly as possible. When one is ready to rise he gives a signal, and is drawn back to his boat by a rope.

Divers cannot remain in the water over a minute on the average, while two minutes taxes the most expert. A very few who have stood under four or five minutes have won great reputations for their extraordinary endurance.

The occupation is injurious to the health, as it requires a tremendous amount of exertion. Divers are short-lived, subject to various diseases, and have been known to expire suddenly upon reaching the surface of the water.

The Drummer's Little Story.

"I never felt myself flattered but once in my life," said the drummer, with the air of a man who thinks he has something worth the telling. "It was down in Maine," he continued, after waiting long enough to set seriously on an edge. "I'd been living on railway sandwiches for a week, and I just longed for a square meal. Well, we had to stop at a way station for a couple of hours, on account of a hot box or something of that sort, and one of the brakemen put me on to what he said was a first-class restaurant. I looked it up and ordered a steak. The steak came, but it was a disappointment. I saw away on it till my arms ached. It was out of the question to chew the small bits I tore off from it, though I tried hard. I gave it up finally, and as I paid my score, I said incidentally: 'That's about the toughest eating I ever experienced.' He took the money, kept it in his drawer, and without a quiver he coolly remarked, 'You don't seem to consider how much good it'll do you in the way of exercise.'"—*Boston Transcript*.

A well-ripened plantain, sliced and fried, is a dish to be relished, but the natives of the South American coast prefer them green, boiled with the flesh of a young monkey or that of an Inagua, the whole highly seasoned with garlic and cayenne pepper.

THE INCA REPUBLIC.

A BIRD'S-EYE VIEW OF PERU AND ITS RESOURCES.

Throwing Off the Spanish Shackles—Disastrous War With Chile—The System of Government—Mineral Products.

The Republic of Peru, the capital of which is Lima, stretches along the Pacific Coast from Ecuador to Chile, having Brazil and Bolivia on the eastern frontier.

It revolted from Spain in 1821, and its first Constitution was adopted in 1828. In 1829 it fought with Colombia. In 1864-67 there was a desultory effort on the part of Spain to renew her domination, when Chile came vigorously and heroically to the rescue of Peru.

In 1878-81, after forming a secret alliance for the purpose with Bolivia, Peru fought a desperate war with its quondam friend, Chile, and in consequence lost the province of Tarapaca and provisionally the department of Tacna.

The area of Peru is about 465,747 square miles, and its population approximates 3,500,000, of whom considerably more than half are aborigines.

The present Constitution of Peru was adopted in 1856, and was revised to some extent in 1860.

There are in Peru, as in most of the other South American Republics, an executive President, a Senate and House of Representatives; but the conditions of Government are not so liberal as in the majority of Republican States. The President is assisted by two Vice-Presidents, one senior to the other, with the first right of succession in case of vacancy.

These three office-holders are elected every four years. An Executive Council of five Ministers, directly responsible to the President, is nominated by him at the time of his entering on his term of office; and he, not the Congress, has the power of removing them.

The twenty departments nominate two members each to the Senate, which also includes Representatives of Tacna.

The House of Representatives contains 110 members, returned by indirect election—the districts choosing electors, who then meet in the chief towns of the department and select Deputies in the ratio of one to every 20,000 inhabitants.

The local government of the departments, like the central State Government, has been somewhat disorganized by war and internal dissensions, so that the Constitution may be said to be in a large measure dependent upon the popular caprice. The established religion is Roman Catholic.

The finances of Peru are greatly demoralized and disorganized, and no recent returns of revenue and expenditure are either reliable or available. The public debt approximates \$250,000,000, the interest on which is not paid, and in consequence the expenditures are considerably in excess of the income. In short, Peru has been practically ruined by the wild policy which it has adopted through the intervention and influence of foreign capitalists.

Peru is perhaps the best known of all South American countries. It is the seat of the ancient civilization of the Incas and contains some of the famous silver mines worked for so many centuries. It is divided by its mountains into three regions—the coast, the central plateau and the Amazon region. The coast line of Peru presents an almost unbroken front of arid ridges of sand or bleak ranges of rock running sometimes to the sea, yet behind those ridges and between those bare mountains are valleys of unparalleled fertility, through which wind streams of water fed by the unending snows of the highest peaks, streams whose volume and force abate as they reach the wall of sand toward the sea and in which they are finally lost. There are few rivers of the multitude along the western slope of the Cordilleras that find their way unbarred by sand to the ocean. In these valleys the products of the field are exuberant and varied, corn, cotton, sugar cane, alfalfa, rice, with grapes, apples, pears, peaches and other fruits, abound. The maturity of the crops depends upon the time of sowing and planting, so that they may be arranged to mature consecutively, thus keeping the mills always at work.

The mineral resources of Peru are very abundant. Silver is found throughout her territory, also gold, coal, copper and many other minerals.

The plateau is an agricultural country broken by many ridges. In the south is a portion of the great basin of Lake Titicaca, the remainder being in Bolivia; the whole is entirely surrounded by hills, thus cutting off all escape for its waters. North of this basin, in the valleys, flow the tributaries of the Amazon; on the plateau they flow due north, and then, escaping through the ridges, pour their waters into the Ucayali, the Huallaga and the Marañon. These again, increased by the streams rising upon the eastern slopes of the Cordilleras, enter the Amazon.

The greater portion of the population live on the central plateau, the province of Jauija being the most thickly inhabited.

The Amazon provinces are thickly covered with vegetation, and are thinly inhabited. They are traversed in all directions by water courses; the climate is mild, and the soil extremely fertile. In this country lies the head of navigation of the Amazon, beyond which the ways open to traffic are few, consisting of mule paths almost impassable during the rainy season. The early Spaniards built extensive roads through the plateau, and it is said that the "Royal Highway" traversed the country from north to south. Along the coast there are also good roads, but across the mountains there are few passages. Several routes are used from the coast to navigation upon the Amazon, as previously mentioned, via the Marañon, Chachapoyas and Huancayo, besides which there are no doubt others to reach the Purus and the Beni.

To overcome the difficulties of transportation and to give a market for the extensive mineral products, railways have been extensively built and projected. The first efforts were toward the coast, and resulted in the construction of the Mollendo and Arequipa and the Callao and the Oroya railways; but recently others have been projected not only to the Pacific, but also to the eastward to reach the Pachitea, the Ucayali and the Purus.—*New York Mail and Express*.

A London firm published 77,000,000 tracts in a year.

Italy and Abyssinia are having a tilt over a twenty.

POPULAR SCIENCE.

Electricity increases mine production. The most unalterable of water colors has been found to be yellow ochre, terra sienna, sepia and blues.

It is said that during June and July the insect life in New York State is much more numerous and varied than in any tropical country.

M. Germain See has discovered a treatment for tuberculosis. It requires the patient to be wrapped in bandages saturated with creosote four or five hours daily.

One of the features of the grand parade in Des Moines during the Iowa State Fair was an electrically propelled buggy, the current being furnished by storage batteries.

An arc lamp with four carbons arranged radially in a nearly horizontal plane, but having their centrally meeting points slightly depressed, has lately appeared in Paris.

Six miles off the Ladrone Islands, in the Pacific Ocean, a Russian vessel took soundings a few weeks ago and found a depth of five miles, the deepest spot yet found in any ocean.

The lowest body of water on the globe is the Caspian Sea. Its level has been gradually lowering for centuries, and now it is eighty-five feet below the level of its neighbor, the Black Sea.

The latest terror discovered by the microscope is the malarial sacchari, which looks like a crab, or even more so, and which has been discovered to the number of 268,000 to the pound in cheap sugar.

There is very little ebb or flow of tide in the Arctic, but occasionally there are very strong currents. All winter there is a general flow of tide and ice toward the south, while in summer this flow is northward.

The English troopship *Euphrates* illustrates the progress of marine engineering. She was built with simple horizontal engines, after which she was fitted with compound vertical engines, and now she is to be provided with engines of the triple-expansion type.

An interesting and useful application of electricity has recently appeared in a device attached to a steering compass for giving an alarm when a vessel is off her course. When the circuit is completed a bell is rung which warns the steersman or the Captain that the ship's direction has been changed.

It is a mistake to suppose that the weather is colder the further north one goes. The northern pole of greatest cold is only about three hundred miles north-east of Yakutsk, Siberia, where the mean annual temperature is a little lower than in the highest latitudes reached by Nares and Greely 1000 miles further north.

One of the most ingenious lightning arresters yet produced has just been brought out. It is automatic in its action and the method by which the apparatus is set for successive lightning discharges is an extremely interesting one. The expansive power of heated air in an inclosed chamber is utilized in this arrester to adjust it for the next discharge.

The world's telegraphic fleet—that is, the array of vessels engaged in laying and repairing submarine cables—is now composed of thirty-eight steamships, ranging in size from 300 to 5000 tons. Two of these vessels belong to the French Government, one of each to the British, Indo-British, Italian and Chinese Governments, and the others to private companies—mostly British.

The Pretty "Pennyweight."